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GB 1211170
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(54) Bath safety mat

(57) A bath safety mat (1) which is able to be fastened through the action of suction cups (5), to the inside of a bath, for example on the base or on the back or side wall thereof, is provided with a thermometer (10) for measuring the temperature of bath water.

The thermometer (10) is set into a recess (9) in the mat (1) which corresponds to the shape of the thermometer and the recess is sealed by a transparent foil (11).

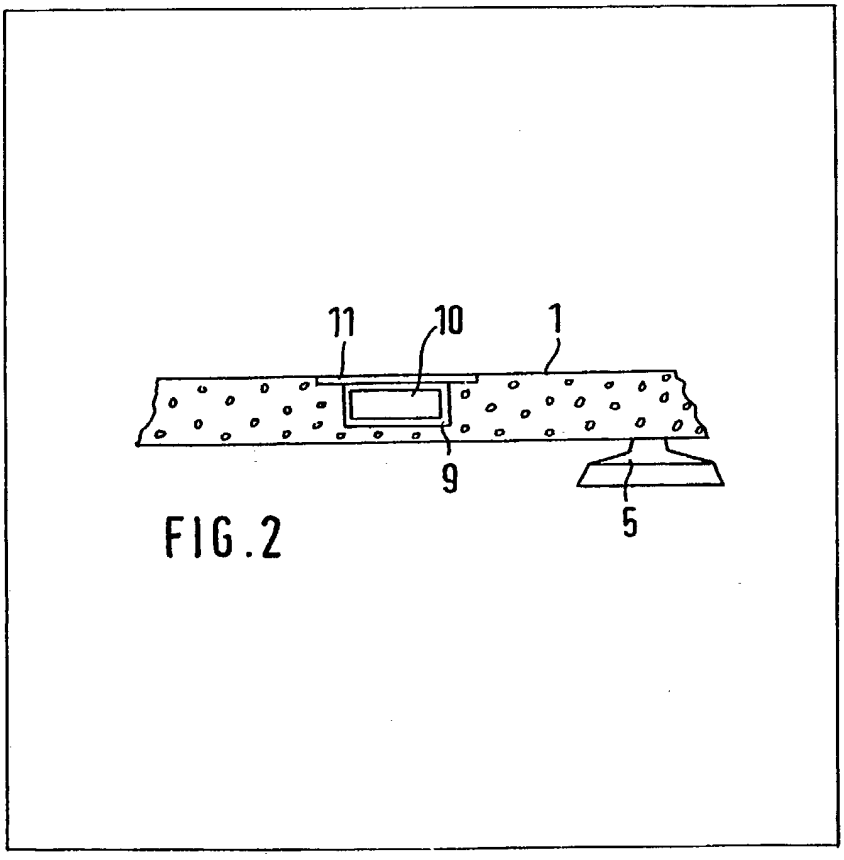

FIG.2

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The drawings originally filed were informal and the print here reproduced is taken from a later filed formal copy.

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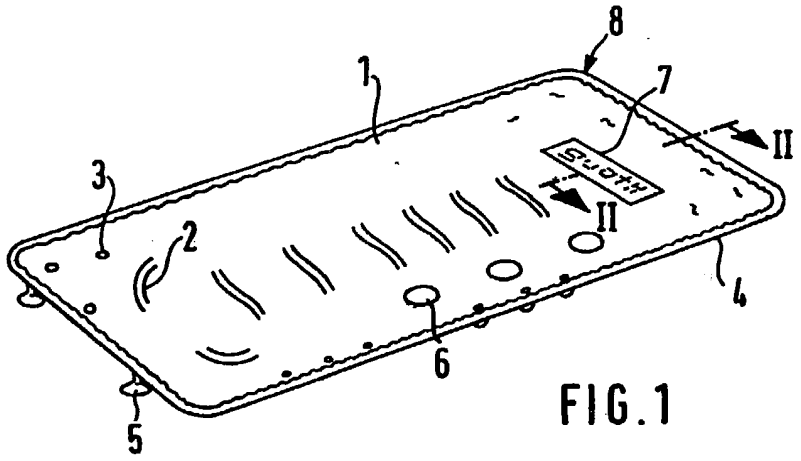

FIG.1

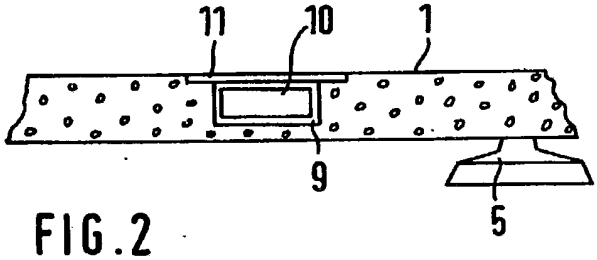

FIG.2

FIG.3

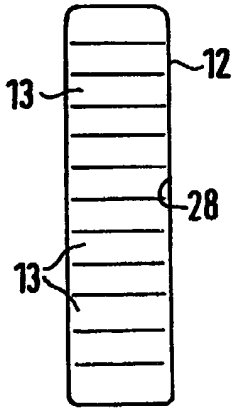

FIG.4

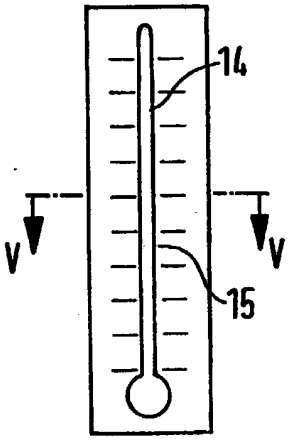

FIG.5

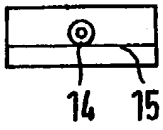

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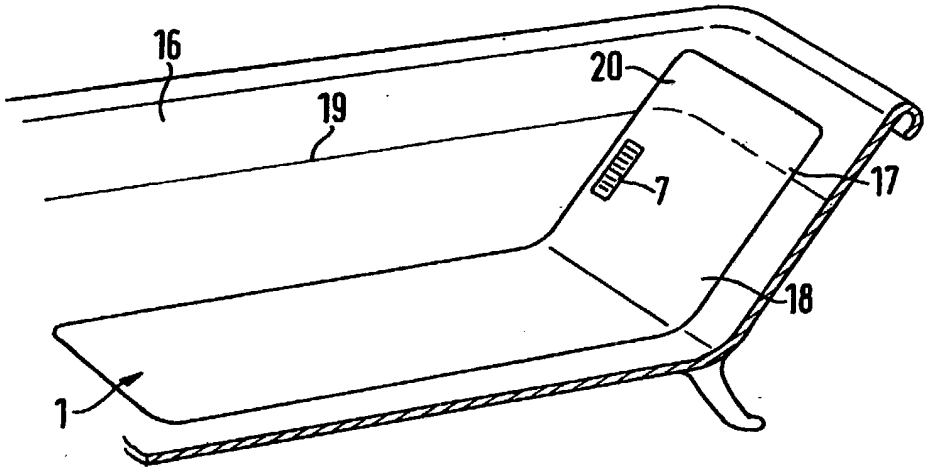
FIG.6



SPECIFICATION

Bath safety mat

This invention relates to a bath safety mat, which is able to be fastened to the inside of a bath, for example on the base or on the back or side wall thereof, to help prevent a person using the bath from slipping and causing possible injury to himself.

Such bath safety mats are constructed in a variety of ways, but generally consist of a rectangular laminar structure of a natural and/or synthetic material, for example a foamed organic material, such as PVC, which is either smooth, grained or embossed on the surface, and on its underside has suction cups with which it may be fastened in the bath.

Such bath safety mats may be so shaped as to fit within the area of the base of a bath, or may be provided with a backrest portion which, in use, extends from the base of the bath up the inclined back wall thereof. Generally, however, such backrest portions are provided separately from the bath safety mat.

The temperature of bath water is conventionally ascertained by means of bath thermometers which are submerged in various ways into the bath water. Such bath thermometers have been constructed as small boats or floats or simply as a thermometer contained in a wooden housing.

These conventional bath thermometers frequently create a nuisance, through being susceptible to being stepped or lain upon, and may thereby be damaged. Furthermore splinters arising from a damaged thermometer can lead to injury to the bather. Even if serious injuries do not occur, a thermometer floating around in the bath, the presence of which is often unnoticed or forgotten, particularly in the case of elderly people, and if the surface of the water is covered with lather or the foam of a bath additive, still represents a disturbing factor to the bather.

It is an object of the present invention to provide a bath safety mat which makes the use of a separate thermometer to ascertain the temperature of the bath water superfluous.

According to the present invention, there is provided a bath safety mat, which is able to be fastened to the inside of a bath characterised in that the mat is provided with a thermometer for measuring the temperature of bath water.

The thermometer is preferably set into the mat, which consists of a synthetic foamed material, and may be fastened thereto by glueing or fusing. The thermometer preferably comprises a protective casing of transparent synthetic material.

The thermometer may conveniently be a digital liquid crystal thermometer, in which the temperature of the bath water is indicated in an easily legible, for example green coloured, luminous number.

However, it is also possible, within the scope of the invention to use a thermometer of another type, such as an alcohol thermometer, which may comprise a protective casing of transparent synthetic material. In this case, care should be taken that the thermometer does not project above the thickness of the mat.

If one takes into account the suction cups on the underside of the mat for fastening it to the bath, bath safety mats of the type described are generally several millimeters thick, for example 8 mm. It is therefore possible to accommodate a thermometer in the mat, of around 4 mm thickness.

In the manufacturing program of the bath safety mat, at the place at which the thermometer is to be set into the mat, it is preferred that the mat be provided with a depression which corresponds in its dimensions to the dimensions of the thermometer and in which the thermometer is then fastened. The thermometer will generally have a flat rectangular strip shape. This can take place through glueing or fusing. Preferably, the depression is then sealed, so as to be water-tight, by a transparent foil.

The thermometer may be located on the bath safety mat at any practical position. If the mat is intended for use on the base of the bath, then the thermometer may be located in the vicinity of a short edge or a long lateral edge of the mat. If the mat comprises a backrest portion, the thermometer may be located at the lateral edge of said portion.

It is preferred for the thermometer to be a different colour from that of the mat, so that a person bathing can easily see the thermometer. If, therefore, the mat is white, then the thermometer could be provided with a coloured edging, which clearly stands out against the white colour.

The bath safety mat of the present invention thus combines the measurement of the bath temperature with safety when bathing. The person bathing can move unhindered and unrestrictedly in the bath; he can even stand or kneel on the thermometer, without fear of damaging it. The thermometer is fully integrated with the bath safety mat, and through its arrangement therewith is protected from damage and also protects the person bathing from injury and disturbance.

The invention will now be further described with reference to the drawings, in which:

Figure 1 shows a diagrammatic perspective view of a bath safety mat according to the present invention;

Figure 2 shows a section through a part of the mat of Figure 1, on the line II—II;

Figure 3 shows a digital liquid crystal thermometer;

Figure 4 shows a liquid thermometer with alcohol;

Figure 5 shows a section on the line V—V of Figure 4; and

Figure 6 shows a diagrammatic perspective view of a further embodiment of a bath safety mat according to the invention.

The bath safety mat illustrated in Figure 1 is of rectangular shape and consists for example of PVC foam with a more or less textured surface.

The bath safety mat 1, abbreviated hereafter as mat is provided with surface textures 2 and 3, and with a closed edge 4, which can likewise be tastefully designed. Suction cups 5 are situated on the underside of the mat, which make possible anchoring of the mat 1 in the bath. In addition, various perforations can be contained in the mat, as represented for example at 6. The thermometer 7 is arranged in the mat 1 in such a way as not only to secure the person bathing from slipping in the bath, but also to give him the possibility of being able to read the temperature of the bath water safely and without risk at any time.

If, with a mat of the type shown in Figure 1, the length amounts to approximately 80 cm and the width approximately 40 cm, then the mat would be fastened to the base of the bath such that the end 8, of the mat, containing the thermometer, points to the foot of the bath, whilst the other end points to the head end of the bath. The person bathing would therefore sit in approximately the first third of the mat at the head end of the bath and would be able to see the thermometer 7 between his legs. When the water is still he can then read the temperature at any time, particularly if, as described in the introduction, a digital liquid crystal thermometer is used. Such a thermometer indicates the temperature by means of luminous green digits.

Figure 2 shows an arrangement of the thermometer in the mat 1. At the position on the mat at which the thermometer is to be fastened, a rectangular depression or recess 9 is formed in the mat, which corresponds approximately to the dimensions of the thermometer. In the case of the accommodation of a thermometer with a liquid crystal display this recess has been represented somewhat exaggeratedly, because a thermometer such as this is generally only approximately 1 to 2 mm thick. Such thermometers are commercially available in any desired construction and for practically any desired temperatures ranges. A strip thermometer such as this is represented in Figure 2 at 10, and set into the recess 9 of the mat 1 and fastened therein for example by glueing or fusing. The thermometer 10 is covered by a transparent foil 11, which is glued or fused onto the mat to form an upper closure for the recess. At 5, a suction cup can be seen which allows the mat to be anchored to the inside of a bath.

Instead of a digital liquid crystal thermometer a more conventional liquid thermometer, for example filled with alcohol, can be used, which is accommodated in a similar, but thicker strip, as will be further elucidated below. For the arrangement of such a thermometer in an inlay, the entire thickness of the inlay itself is available, if required, but also the layer which is produced including the suction cups 5 fastened on the inlay, i.e. the thermometer itself can also project a short distance beyond the under side of the inlay.

A flat rectangular strip shaped digital liquid crystal thermometer is shown in Figure 3. This thermometer 12 is a strip of synthetic material with individual sections 13 reacting to different temperatures. The sections 1 indicate their respective temperature through a digital reading. The illustrated thermometer is registering a bath temperature of 28°C.

In Figure 4 a liquid thermometer, for example filled with alcohol, is shown, which has the usual capillary tube 14 for the alcohol and scale 15 on which the temperature can be read. The whole unit is a rectangular strip of synthetic material a few millimetres thick, which is illustrated in section in Figure 5.

In Figure 6 a further embodiment of a mat according to the invention is shown in an outlined bath 16. This mat 1 is longer than that illustrated in Figure 1. It extends up the inclined back wall 17 of the bath 16, to form a back rest portion 18. The line 19 is intended to indicate the water level. The thermometer 7 is arranged at a lateral edge 20 of the backrest portion 18 and thereby lies somewhat closer to the water surface than in the case of the mat shown in Figure 1.

The thermometer 7 can of course be larger in relation to the bath mat than as shown in Figures 1 or 6. It can also be placed at a different position, thus for example on the long side or more than one such thermometer can be present.

CLAIMS

1. A bath safety mat which is able to be fastened to the inside of a bath, characterised in that the mat is provided with a thermometer for measuring the temperature of bath water.

2. A mat according to Claim 1, characterised in that the thermometer is set into the mat.

3. A mat according to Claim 2, characterised in that the thermometer has a flat rectangular strip shape and is set into the mat in a rectangular recess corresponding to the shape of the thermometer, and the recess is sealed, so as to be watertight, by a transparent foil.

4. A mat according to any preceding Claim, characterized in that the thermometer is fastened to the mat by glueing or fusing.

5. A mat according to any preceding Claim, characterised in that the thermometer comprises a protective casing of transparent synthetic material.

6. A mat according to any preceding Claim, characterised in that the thermometer is a digital liquid crystal thermometer.

7. A mat according to any of Claims 1 to 5, characterised in that the thermometer is a liquid thermometer.

8. Inlay according to any preceding Claim, characterised in that the mat comprises a backrest portion and the thermometer is located at the lateral edge of said portion.

9. A mat according to any preceding Claim, characterised in that the mat is formed from a synthetic foamed material.

10. A bath safety mat substantially as herein described with reference to and as shown in the accompanying drawings.

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